



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,690	10/07/2003	Ravi Kuchibhotla	CS23737RL	6201
20280	7590	01/03/2007	EXAMINER	
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			VU, MICHAEL T	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	01/03/2007	PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/680,690	KUCHIBHOTLA ET AL.
Examiner	Art Unit	
Michael Vu	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 24 October 2006.

2a) This action is FINAL.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 3-24 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1, 3-24 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date: _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's Remarks/Arguments filed October 24, 2006, have been fully considered but they are not persuasive.

In response to applicant's Remarks/Arguments in claims 1, 10, 17 and 23 that neither Haverinen nor Abrol show or suggest "an indicator to indicate whether a substitute public land mobile network is allowed" on page 2.

And further "determining whether the selected PLMN-id corresponds to a shared radio access network (RAN)", and "including the indicator in the registration request message" on page 3.

Examiner respectfully disagrees. The examiner must give the broadest reasonable interpretation to all claims 1, 10, 17 and 23 that Haverinen clearly teach the sharing networks such as GSM, UMTS, and CDMA, in which allows network operators to share resources by allowing multiple core networks operated typically by different operators to connect to the radio network controller (RNC) which control the radio resources, followed by details of Haverinen if the PLMN is not the home network (HPLMN) of the mobile station (MS), i.e. the mobile station is roaming in the PLMN, the roamed network must communicate with the HPLMN according to an international mobile subscriber identity **IMSI indicated by a universal subscriber identity module USIM of the mobile station MS for purposes of authentication and charging**. The

identifier can also indicate some other UMTS network PLMN service or network element, and PLMN identifiers PLMN ID are also determined in the USIM connected to the MS to be used in network selection (for example a PLMN ID can consist of MCC (Mobile Country Code) and MNC (Mobile Network Code) sections of the IMSI. The PLMN identifiers are added to the USIM for example during the personalization thereof before the home operator HPLMN gives the USIM to the user a PLMN identifier list controlled by the operator, and a PLMN identifier list controlled by the user, which contain PLMN identifiers in order of priority to see whether a PLMN identifier determined on the list is defined. **The PLMN identifiers can also be supplemented with an identifier indicating the access technology, such as UTRA or GSM (See paragraph [0038]).**

Moreover, Haverinen clearly disclosed the mobile station performs PLMN selection on the basis of a comparison of the received PLMN identifiers PLMN ID and the PLMN identifiers stored in the USIM. According to the UMTS specifications, network selection can be either automatic or manually connected and/or can be set up to another network based on the PLMN list either controlled by the users or operators defined in the USIM such as in which the identifier can also indicate some other UMTS networks PLMN service or network elements, and **Haverinen further teaches the mobile station MS can also maintain a list of forbidden networks and/or forbidden PLMNs, means NOT ALLOW NETWORKS**, and the MS can specifically ask for transmission of the system data for example by indicating that it wants to use the services of the UMTS network PLMN. (See paragraph [0041-0048]).

Therefore, the argued limitations are the same as disclosed by the reference or the limitations are written broad such that they read on the cited art, rejections are maintained as repeated below:

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haverinen (US 2003/0119481) in view of Abrol (US 2003/0099219).

Regarding **claims 1, 10, 17, and 23**, Haverinen teaches a method for selecting a core network for a communication device comprising the steps of [0002, 0016, 0020, 0032]: receiving at least one public land mobile network identifier (PLMNid) (Abstract, [0004]); selecting a PLMNid to form a selected public land mobile network identifier [0005-0009]; setting an indicator to indicate whether a substitute public land mobile network is allowed [0009, 0022, 0038-041]; determining whether the selected public land mobile network identifier corresponds to a shared network [0004-0009, 0015-0016, 0032]; forming a registration request message containing the selected public land mobile network identifier [0043-0048]; if the selected public land mobile network

identifier corresponds to a shared network [0004-0009, 0015-0016, 0032]; **but Haverinen does not clearly teach on** including the indicator in the registration request message and transmitting the registration request message, Radio Access Network (RAN).

However, Abrol teaches maintaining packet data connectivity in a wireless communications network that form a registration request message, and transmitting the registration request message over the network interface, and RAN (Fig. 1, [0008, 0025, 0030, 0039-0042, 0049]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haverinen, such that including the indicator in the registration request message and transmitting the registration request message, to allow users to connect to different network or Internet access without disrupting service.

Regarding **claims 3, 6** Haverinen/Abrol teach a method according to claim 1, wherein the step of selecting includes the communication device automatically choosing the selected public land mobile network identifier according to the following priority levels [0042]: (1) registered public land mobile network [0022], (2) home public land mobile network, (3) user-controlled list of public land mobile network [0038-0042], (4), operator-controlled list of public land mobile network [0042], (5) public land mobile network with sufficient received signal quality in random order [0053, 0058], (6) other public land mobile network in order of received signal quality [0053, 0058] of Haverinen.

Regarding **claim 4**, Haverinen/Abrol teach a method according to claim 3, wherein the step of setting indicates that a substitute public land mobile network is

allowed when the selected public land mobile network identifier is selected at priority level (5) [0038-0043] of Haverinen.

Regarding **claim 5**, Haverinen/Abrol teach a method according to claim 3, wherein the step of setting indicates that a substitute public land mobile network is allowed when the selected public land mobile network identifier is selected at priority level (6) [0038-0043] of Haverinen.

Regarding **claim 7**, Haverinen/Abrol teach a method according to claim 6, wherein the step of selecting further includes: receiving a selected public land mobile network identifier from the user (Abstract, [0006]) of Haverinen.

Regarding **claim 8**, Haverinen/Abrol teach a method according to claim 6, wherein the step of setting comprises: setting the indicator to indicate that a substitute public land mobile network is disallowed [0009, 0021-0022, 0038-0047] of Haverinen.

Regarding **claim 9**, Haverinen/Abrol teach a method according to claim 1, wherein the step of setting comprises: setting the indicator to indicate that a substitute public land mobile network is disallowed [0009, 0021-0022, 0038-0047] of Haverinen.

Regarding **claim 11**, Haverinen/Abrol teach method according to claim 10, the comprising the steps of: determining a substitute public land mobile network, if the indicator indicates that a substitute public land mobile network is allowed [0009, 0021-0022, 0038-0047] of Haverinen; and forwarding the registration request message to the substitute public land mobile network (Fig. 1, [0008, 0025, 0030, 0039-0043, 0049]) of Abrol.

Regarding **claim 12**, Haverinen/Abrol teach a method according to claim 10, wherein the substitute public land mobile network shares radio access resources with a public land mobile network indicated by the selected public land mobile network identifier [0005-0009, 0038-0045, 0056-0059] of Haverinen.

Regarding **claim 13**, Haverinen/Abrol teach a method according to claim 10, wherein the substitute public land mobile network is a public land mobile network indicated by the selected public land mobile network identifier [0005-0009, 0038-0045, 0056-0059] of Haverinen.

Regarding **claim 14**, Haverinen/Abrol teach a method according to claim 10, wherein the substitute public land mobile network is not a public land mobile network indicated by the selected public land mobile network identifier [0005-0009, 0038-0045, 0056-0059] of Haverinen.

Regarding **claim 15**, Haverinen/Abrol teach a method according to claim 10, comprising the step of: forwarding the registration request message to a public land mobile network identified by the selected public land mobile network identifier, if the indicator indicates that a substitute public land mobile network is not allowed [0005-0009, 0021-0022, 0038-0045, 0056-0059] of Haverinen.

Regarding **claim 16**, the combination of Haverinen/Abrol teach a method according to claim 10, comprising the step of: forwarding the registration request message to a public land mobile network identified by the selected public land mobile network identifier, if the registration request message does not include an indicator

[0005-0009, 0021-0022, 0038-0045, 0056-0059] of Haverinen, and [0008, 0025, 0030, 0039-0043, 0049] of Abrol.

Regarding **claim 18**, Haverinen/Abrol teach the method according to claim 17, wherein the step of setting comprises: setting the indicator to indicate that a substitute PLMN is disallowed when the UE is in manual network selection mode [0038-0043] of Haverinen.

Regarding **claim 19**, Haverinen/Abrol teach the method according to claim 17, wherein the step of setting comprises: setting the indicator to indicate that a substitute PLMN is disallowed when the UE automatically selects a PLMNid that corresponds to a registered PLMN (RPLMN) of the UE, a home PLMN (HPLMN) of the UE, a PLMN on a user-controlled list of PLMNs, or a PLMN on an operator-controlled list of PLMNs [0038-0043] of Haverinen.

Regarding **claim 20**, the combination of Haverinen/Abrol teach a method according to claim 17, the comprising the steps of: receiving the registration request message at a radio access network (RAN) (Fig. 1, 0029-0032) of Abrol; extracting the selected PLMNid (Abstract of Haverinen) from the registration request message [0049]; and determining if the registration request message includes the indicator [0008, 0025, 0030, 0039-0042, 0049] of Abrol.

Regarding **claim 21**, the combination of Haverinen/Abrol teach the method according to claim 20, the comprising the steps of: determining a substitute PLMN, if the

indicator indicates that a substitute PLMN is allowed [0038-0043] of Haverinen; and forwarding the registration request message to the substitute PLMN [0049] of Abrol.

Regarding **claim 22**, Haverinen/Abrol teach the method according to claim 21, wherein the substitute PLMN shares radio access resources with a PLMN indicated by the selected PLMNid (Fig. 2, [0038-0043] of Haverinen).

Regarding **claim 24**, Haverinen/Abrol teach a method according to claim 6, wherein the priority level (3) user-controlled list of public land mobile networks is presented in priority order [0038-0043] of Haverinen.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael T. Vu  
Examiner



ERIKA A. GARY  
PRIMARY EXAMINER